93510.1 **PATENT** 

#### **DOCKET GRUNECK 0009-US**

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

LENDLEIN et al.

Examiner: To be assigned

Serial No.:

To be assigned

Group Art Unit: To be assigned

Filing Date:

Filed herewith

For:

Photosensitive Polymeric Networks

Customer No.:

23719

Kalow & Springut LLP

488 Madison Avenue, 19th Floor New York, New York 10022

June 30, 2005

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### INFORMATION DISCLOSURE STATEMENT

#### Commissioner for Patents:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, Applicants wish to make known to the Patent and Trademark Office the references set forth on the attached form PTO/SB/08A and B. Applicants do not admit that the references are "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserves the right to traverse or antedate any such reference. Although the aforesaid references are made known to the Patent and Trademark Office in compliance with Applicants' duty to disclose all information of which they are aware and believe relevant to the examination of the above-identified application, Applicants believe that their invention is patentable.

Certificate of Express Mailing Under 37 C.F.R. § 1.10

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TOR SMELAWN
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30 JUNE 2003

Applicant: LENDLEIN et al.
Serial No.: To be assigned
Filing Date: Filed herewith
Information Disclosure Statement

June 30, 2005 Page 2 of 5

### I. U.S. PATENT DOCUMENTS

PATENT NO.	DATE ISSUED/PUBLISHED	TITLE		
3,894,075	08 July 1975	Preparation of Hydroxyl-		
to SCHOEN		Terminated Polyesters		
4,035,548	12 July 1977	Laminated Articles Prepared		
to CHANG et al.		From Transparent, Non-Blooming Poly(lactone-urethane) Interlayers		
4,085,092	18 April 1978	Transparent, Optically Clear		
to CHANG et al.		Poly(lactone-urethane) Interlayers for Laminated Safety Glass		
4,857,579	15 August 1989	Thermosettable Fiber Reinforced		
to DOMEIER		Resin Compositions		
4,923,934 to WERNER	08 May 1990	Interpenetrating Polymer Network of Blocked Urethane Prepolymer, Polyol, Epoxy Resin and Anhydride		
5,098,776	24 March 1992	Shape Memory Fibrous Sheet and		
to KOBAYASHI et al.		Method of Imparting Shape Memory Property to Fibrous Sheet Product		
5,155,199	13 October 1992	Makeup Material for Human Use		
to HAYASHI				
5,442,037	15 August 1995	Polyester Prepolymer Showing		
to LEE et al.		Shape-Memory Effect		
6,156,842	05 December 2000	Structures and Fabricated Articles		
to HOENIG et al.		Having Shape Memory Made From a-Olefin/Vinyl or		
		Vinylidene Aromatic and/or		
		Hindered Aliphatic Vinyl or Vinylidene Interpolymers		
6,160,084	12 December 2000	Biodegradable Shape Memory		
to LANGER et al.		Polymers		
6,479,222	12 November 2002	Protective Overcoat for		
to JONES et al.		Photographic Elements		
6,852,825	08 February 2005	Polyester Urethanes		
to LENDLEIN et al.				

Applicant: LENDLEIN et al.
Serial No.: To be assigned
Filing Date: Filed herewith
Information Disclosure Statement

June 30, 2005 Page 3 of 5

PATENT No.	DATE ISSUED/PUBLISHED	TITLE
2004/0014929 A1	22 January 2004	Polyester Urethanes
by LENDLEIN et al.		
2004/0024143 A1	05 February 2004	Interpenetrating Networks
by LENDLEIN et al.		

#### **II. FOREIGN PATENT DOCUMENTS**

Publication No.	COUNTRY	PUBLICATION DATE
DE 689 07 553 T2	DE	09 May 1990
DE 689 08 081 T2	DE	20 October 1989
DE 694 26 882 T2	DE	04 April 1996
EP 0 422 693	EPO	17 April 1991
EP 0 696 605	EPO	31 July 1995
WO 99/42147	WIPO	26 August 1999
WO 99/42528	WIPO	26 August 1999
WO 01/91822	WIPO	06 December 2001
WO 03/084490	WIPO	16 October 2003
WO 03/084489	WIPO	16 October 2003
WO 03/084491	WIPO	16 October 2003

#### III. NON PATENT PUBLICATIONS

International Search Report for PCT/EP03/14414, published as WO 2004/062706.

KIM, B. K. et al. (1996) "Polyurethanes having shape memory effects," Polymer 37/26:5781-5793.

LENDLEIN, A. et al.., "AB-Polymer Networks Based On Oligo(epsilon-Caprolactone) Segments Showing Shape-memory Properties," *Proc. Natl. Acad. Sci. USA*, vol. 98, no. 3, January 2001 (2001-01), Pages 842-847, XP002251532.

Applicant: LENDLEIN et al.
Serial No.: To be assigned
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June 30, 2005 Page 4 of 5

LENDLEIN, A. et al.., "Formgedächtnispolymere," Angewandte Chemie, vol. 114, no. 12, 17 June 2002 (2002-06-17), pages 2138-2162, XP002251533.

DATABASE WPI, Section Ch, Week 199214, Derwent Publications Lt., London, GB; Class A12, AN 1992-109202 XP002251534 & JP 04 050234 A (Asahi Chem Ind Co Ltd), 19 February 1992 (1992-02-19).

PATENT ABSTRACTS OF JAPAN, vol. 016, no. 213 (C-0942, 20 May 1992 (1992-05-20) & JP 04 0451416 A (Noevir Co Ltd; Others: 01), 12 February 1992 (1992-02-12).

Applicant below provide U.S. family members of the foreign language references and, for the convenience of the Examiner.

ENGLISH LANGUAGE FAMILY MEMBERS OF FOREIGN LANGUAGE REFERENCES					
DE 689 07 553 T2	US 5,155,199				
DE 694 26 882	US 5,442,037				
DE 689 08 081	US 5,098,776				
*WO 03/084490 A1	U.S. Appl. Ser. No. 10/511,019; translation included herewith				
*WO 03/084491 A1	U.S. Appl. Ser. No. 10/510,873; translation included herewith				
*WO 03/084489 A1	U.S. Appl. Ser. No. 10/510,889, translation included herewith				

Applicant: LENDLEIN et al.
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June 30, 2005
Page 5 of 5

Because no action has been taken on the merits, Applicants submit that no fee is due at this time. However, if a fee is deemed necessary, please charge Deposit Account No. 11-0171.

Respectfully submitted,

Tor Smeland

Registration No.: 43,131 Attorney for Applicant

Kalow & Springut LLP (212) 813-1600

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Application Number

Filing Date
First Named Inventor
Art Unit
Examiner Name

Attorney Docket Number

Complete if Known

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Filed Herewith 30 June 2005

First Named Inventor

LENDLEIN, Andreas

To be assigned

Attorney Docket Number

GRUNECK 0009-US

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

one

U. S. PATENT DOCUMENTS Name of Patentee or Pages, Columns, Lines, Where Publication Date Examiner **Document Number** Cite MM-DD-YYYY Initials\* No. Applicant of Cited Document Relevant Passages or Relevant Number-Kind Code<sup>2</sup> (F known) Figures Appear US-3,894,075 07-08-1975| SCHOEN US-07-12**-**1977| CHANG et al. 4,035,548 US-4,085,092 04-18-1978 | CHANG et al. US-4,857,579 **DOMEIER** 08-15-1989 US-WERNER 05-08-1990 4,923,934 US-5,098,776 03-24-1992 KOBAYASHI et al. US-5,155,199 HAYASHI 10-13-1992 US-5,442,037 08-15-1995 LEE et al. US-6,156,842 12-05-2000 HOENIG et al US-6,160,084 12-12-2000 LANGER et al. US-11-12-2000 JONES et al. 6,479,222 02-08-2005 LENDLEIN et al. 6,852,825 US-2004/0014929 A1 01-22-2004 LENDLEIN et al US-2004/0024143 A1 LENDLEIN 02-05-2004 US-US-US-US-US-

		FORE	IGN PATENT DOCU	JMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>2</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T <sup>6</sup>
		DE 689 07 553 T2		Mitsubishi Jukogyo KK	_	
		DE 689 08 081 T2	05-05-1990	Mitsubishi Jukogyo KK		
		DE 694 26 882 T2	04-04 1996	Tongyang Nylon Co. Ltd		
		EP 0 422 693		Thoratec Labs Corp.		
		EP 0 696 605	02-14-1996	Neuenschwander et al.		
		WO 99/42147	08-26-1999	M.I.T.		

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Complete if Known Substitute for form 1449/PTO To be assigned 5 **Application Number** Filing Date Filed Herewith 30 June 2005 INFORMATION DISCLOSURE First Named Inventor LENDLEIN, Andreas STATEMENT BY APPLICANT Art Unit To be assigned (Use as many sheets as necessary) Examiner Name To be assigned three **Attorney Docket Number GRUNECK 0009-US** 

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U. S. PATENT DOCUMENTS						
Examiner Initials*		Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
		Number-Kind Code <sup>2 (# known)</sup>			Figures Appear	
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		Country Code <sup>3 "</sup> Number <sup>4 "</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	Τ°	
		WO 99/42528	08-26-1999	MNEMOSCIENCE GMBH			
		WO 01/91822	12-06-2001	MNEMOSCIENCE GMBH			
		WO 03/084490	10-16-2003	MNEMOSCIENCE GMBH		L	
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INFORMATION DISCLOSURE				Filing Date	Filed Herewith 30 June 2005		
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Initials*	No.1	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>			
		International Search Report for PCT/EP03/14414, published as WO 2004/062706.				
		KIM, B. K. et al. (1996) "Polyurethanes having shape memory effects," Polymer 37/26:5781-5793.				
		LENDLEIN, A. et al, "AB-Polymer Networks Based On Oligo(epsilon-Caprolactone) Segments Showing Shape-memory Properties," Proc. Natl. Acad. Sci. USA, vol. 98, no. 3, January 2001 (2001-01), Pages 842-847, XP002251532.				
		LENDLEIN, A. et al, "Formgedächtnispolymere," Angewandte Chemie, vol. 114, no. 12, 17 June 2002 (2002-06-17), pages 2138-2162, XP002251533.				
		DATABASE WPI, Section Ch, Week 199214, Derwent Publications Lt., London, GB; Class A12, AN 1992-109202 XP002251534 & JP 04 050234 A (Asahi Chem Ind Co Ltd), 19 February 1992 (1992-02-19).				
		PATENT ABSTRACTS OF JAPAN, vol. 016, no. 213 (C-0942, 20 May 1992 (1992-05-20) & JP 04 0451416 A (Noevir Co Ltd; Others: 01), 12 February 1992 (1992-02-12).				
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